



# Relationship between the HLA-G 14bp insertion/deletion polymorphism and susceptibility to autoimmune disease: a meta-analysis

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**ABSTRACT.** Numerous studies have investigated the potential relationship between the human leukocyte antigen (HLA)-G 14-bp insertion/deletion (INS/DEL) polymorphisms and autoimmune disease (AID). However, published results are inconclusive. Our aim was to determine whether the 14-bp INS/DEL polymorphism in the HLA-G gene contributes to the risk of AID. A systemic literature search of the PubMed and EMBASE databases was conducted to identify eligible studies investigating the association of the HLA-G 14-bp INS/DEL polymorphism with AID. Our analysis included 11 publications involving a total of 6462 individuals. Overall, no significant association between the HLA-G 14-bp INS/DEL polymorphism and AID was detected in any comparison model. Further subgroup analyses based on AID types and ethnicity also revealed no significant associations. Our results suggest that the HLA-G 14-bp INS/DEL polymorphism is unrelated

to the development of AID. Further studies including larger sample sizes are warranted to confirm these results.

**Key words:** Autoimmune disease; Human leukocyte antigen-G; Indel polymorphism; Meta-analysis; Susceptibility